

**CLAIM AMENDMENTS:**

Please amend the claims as follows:

1. (Currently amended) A parallelized CRC calculation method for a message, comprising the steps of:

preparing a generator matrix representing  $[[an]]$  a Linear Feedback Shift Register (LFSR) corresponding to a form for linearly mapping an input vector to a remainder vector;

arranging the message inputted in the form to the input vector;

multiplying the generator matrix to the input vector derived from the message; and

producing a CRC result.

2. (Original) A method according to claim 1, wherein the LFSR is configured for the message to be shifted thereinto from a MSB side.

3. (Original) A method according to claim 1, wherein the LFSR is configured for the message to be shifted thereinto from a LSB side.

4. (Original) A method according to claim 1, wherein the form is a byte-wise form.

5. (Original) A method according to claim 1, wherein the form is a word-wise form.
6. (Original) A method according to claim 1, wherein the form is a doubleword-wise form.
7. (Original) A method according to claim 5, wherein the step of arranging the message to the input vector comprises padding the message with one or more dummies.
8. (Original) A method according to claim 5, further comprising initiating the LFSR with a specific value.
9. (Original) A method according to claim 8, further comprising identify a length type of the message and determining the specific value in accordance with the length type.
10. (Original) A method according to claim 5, further comprising comparing the CRC result with a specific pattern.

11. (Original) A method according to claim 10, further comprising identify a length type of the message and determining the specific pattern in accordance with the length type.
12. (Original) A method according to claim 6, wherein the step of arranging the message to the input vector comprises padding the message with one or more dummies.
13. (Original) A method according to claim 6, further comprising initiating the LFSR with a specific value.
14. (Original) A method according to claim 13, further comprising identifying a length type of the message and determining the specific value in accordance with the length type.
15. (Original) A method according to claim 6, further comprising comparing the CRC result with a specific pattern.
16. (Original) A method according to claim 15, further comprising identifying a length type of the message and determining the specific pattern in accordance with the length type.

17. (Original) A method according to claim 1, wherein the step of multiplying the generator matrix to the input vector comprises performing an iteration procedure between the remainder vector and the input vector.
18. (Currently amended) A parallelized CRC calculation system for verifying a message, comprising:
- means for arranging the message inputted in a form to an input vector;
  - a generator matrix representing [[an]] a Linear Feedback Shift Register (LFSR) corresponding to the form for linearly mapping the input vector to a remainder vector; and
  - means for producing a CRC result.
19. (Original) A system according to claim 18, wherein the LFSR is configured for the message to be shifted thereinto from a MSB side.
20. (Original) A system according to claim 18, wherein the LFSR is configured for the message to be shifted thereinto from a LSB side.
21. (Original) A system according to claim 18, wherein the form is a byte-wise form.

22. (Original) A system according to claim 18, wherein the form is a word-wise form.

23. (Original) A system according to claim 18, wherein the form is a doubleword-wise form.

24. (Original) A system according to claim 22, further comprising one or more dummies for padding the message thereto.

25. (Original) A system according to claim 22, further comprising a specific value for initiating the LFSR therewith.

26. (Original) A system according to claim 25, further comprising means for identifying a length type of the message and determining the specific value in accordance with the length type.

27. (Original) A system according to claim 22, further comprising means for comparing the CRC result with a specific pattern.

28. (Original) A system according to claim 27, further comprising means for identifying a length type of the message and determining the specific pattern in accordance with the length type.

29. (Original) A system according to claim 23, further comprising one or more dummies for padding the message thereto.

30. (Original) A system according to claim 23, further comprising a specific value for initiating the LFSR therewith.

31. (Original) A system according to claim 30, further comprising means for identifying a length type of the message and determining the specific value in accordance with the length type.

32. (Original) A system according to claim 23, further comprising means for comparing the CRC result with a specific pattern.

33. (Original) A system according to claim 32, further comprising means for identifying a length type of the message and determining the specific pattern in accordance with the length type.